The Changing Face of Healthcare: Here, There, Everywhere, Anywhere

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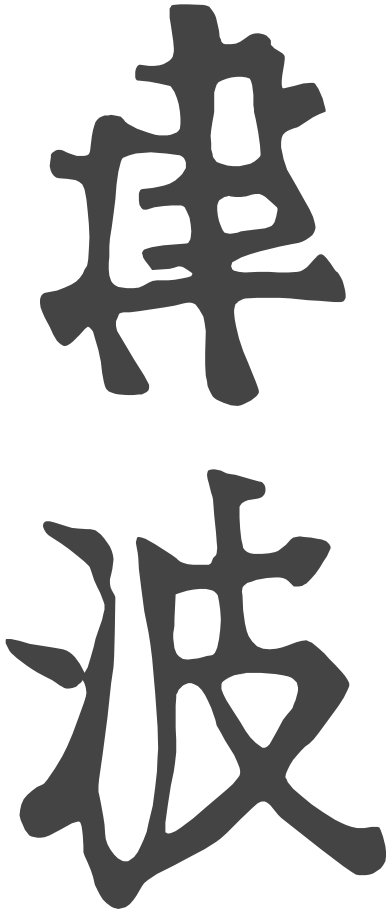
Chief Strategic and Development Officer
Dell Healthcare Services

津波

The Metaphor...



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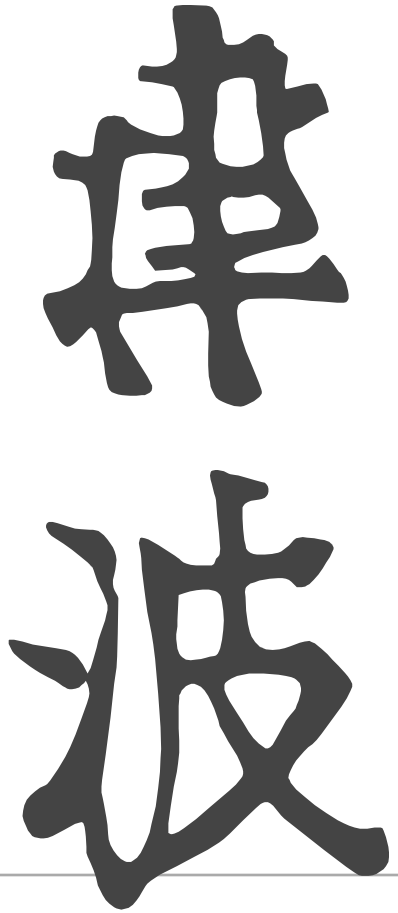
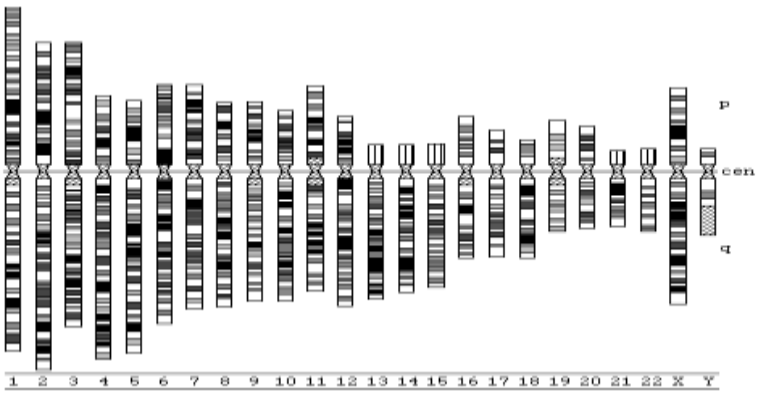
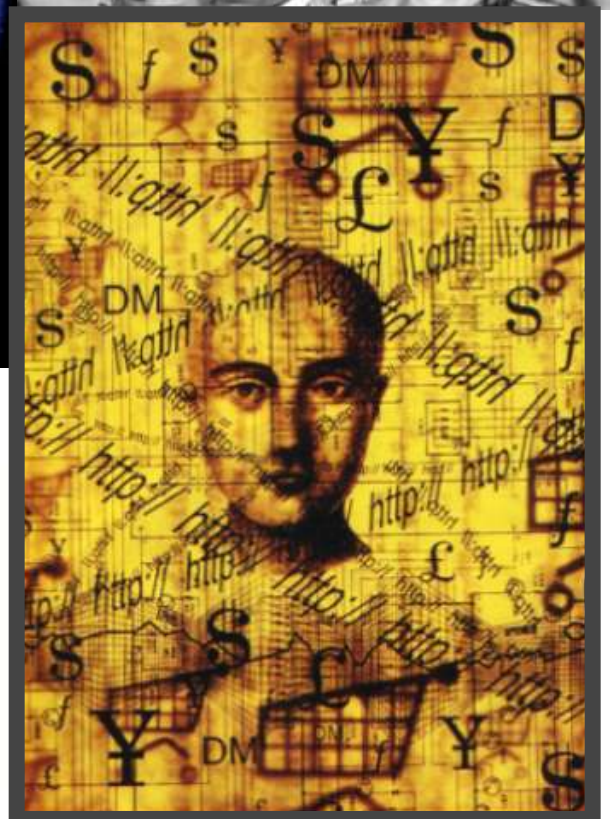


The Domains of Change – in Healthcare…





McDonald's

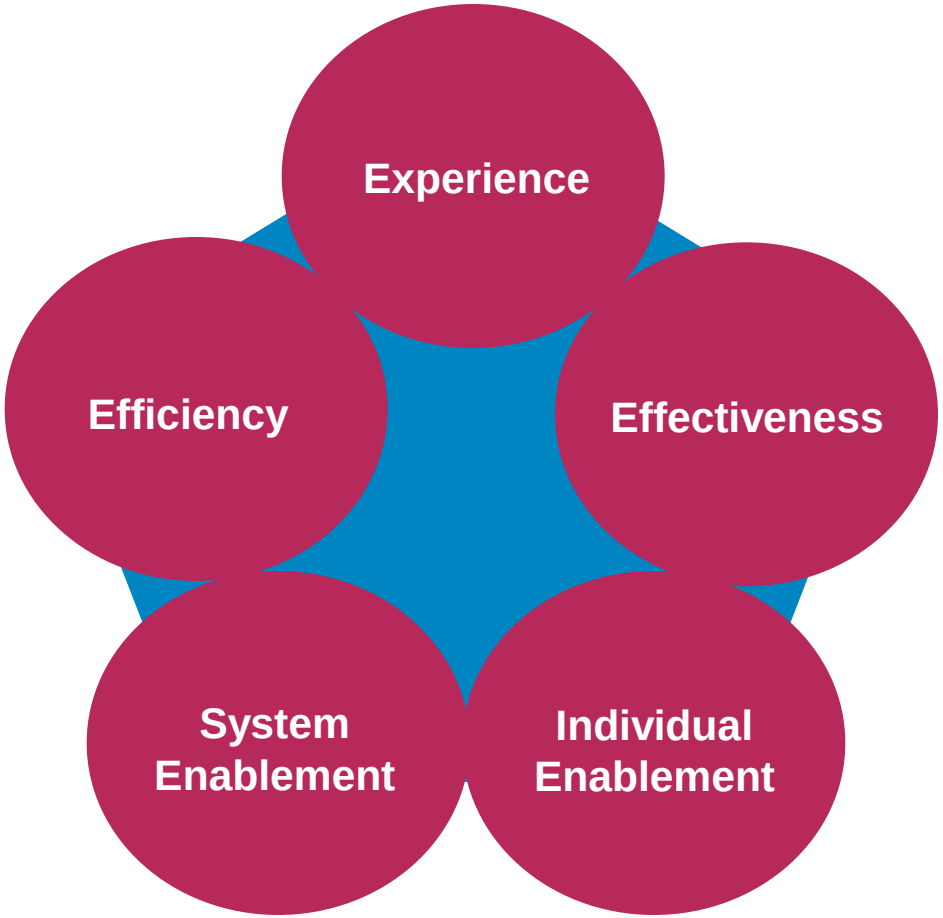
LEXUS

Kmart

SAKS FIFTH AVENUE

RUTH'S CHRIS STEAK HOUSE

The Future of Healthcare…

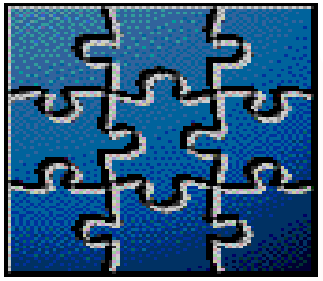


The Future of Healthcare…

- Peripheral Intelligence
- Workforce Globalization
- Professional Collaboration
- Diagnostic Diffusion
- Cloud Computing

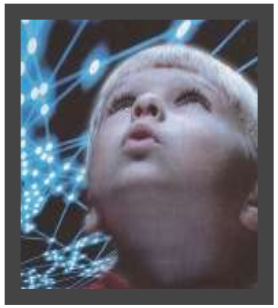
The Future of Healthcare…

Predictive Knowledge



Standardization

Peripheral Intelligence



CaaS

Artificial Intelligence

Knowledge Management

Pattern Recognition

Data Mining

Decision-Support

Dashboards

Benchmarking

Personalization

In May, 2010 *Lancet Neurology* published a study showing that the generic drug lithium did nothing to slow the course of amyotrophic lateral sclerosis (ALS

In December, 2008, PatientsLikeMe, a for-profit patient networking site and data aggregator based in Cambridge, MA, came to a similar conclusion, more quickly and at much less cost.

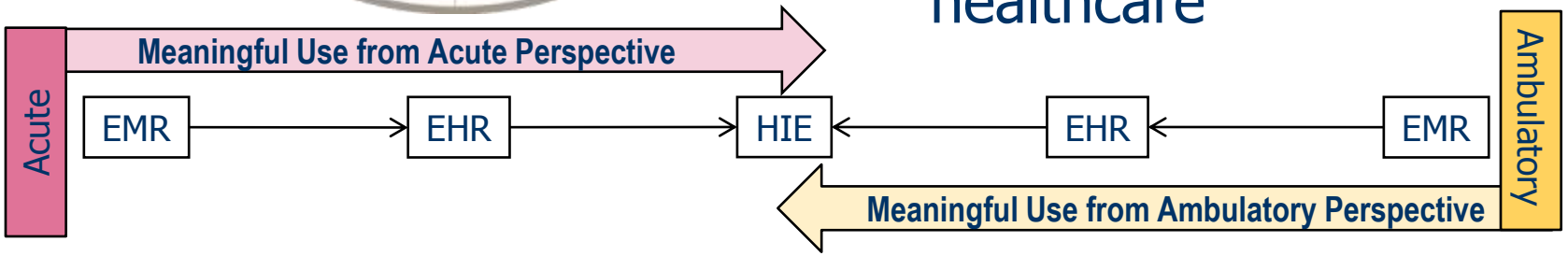
How will Predictive Knowledge Management become reality?

- he onnecti vi t y
- he . et wor k
- he . enome
- nd, r anspar ency

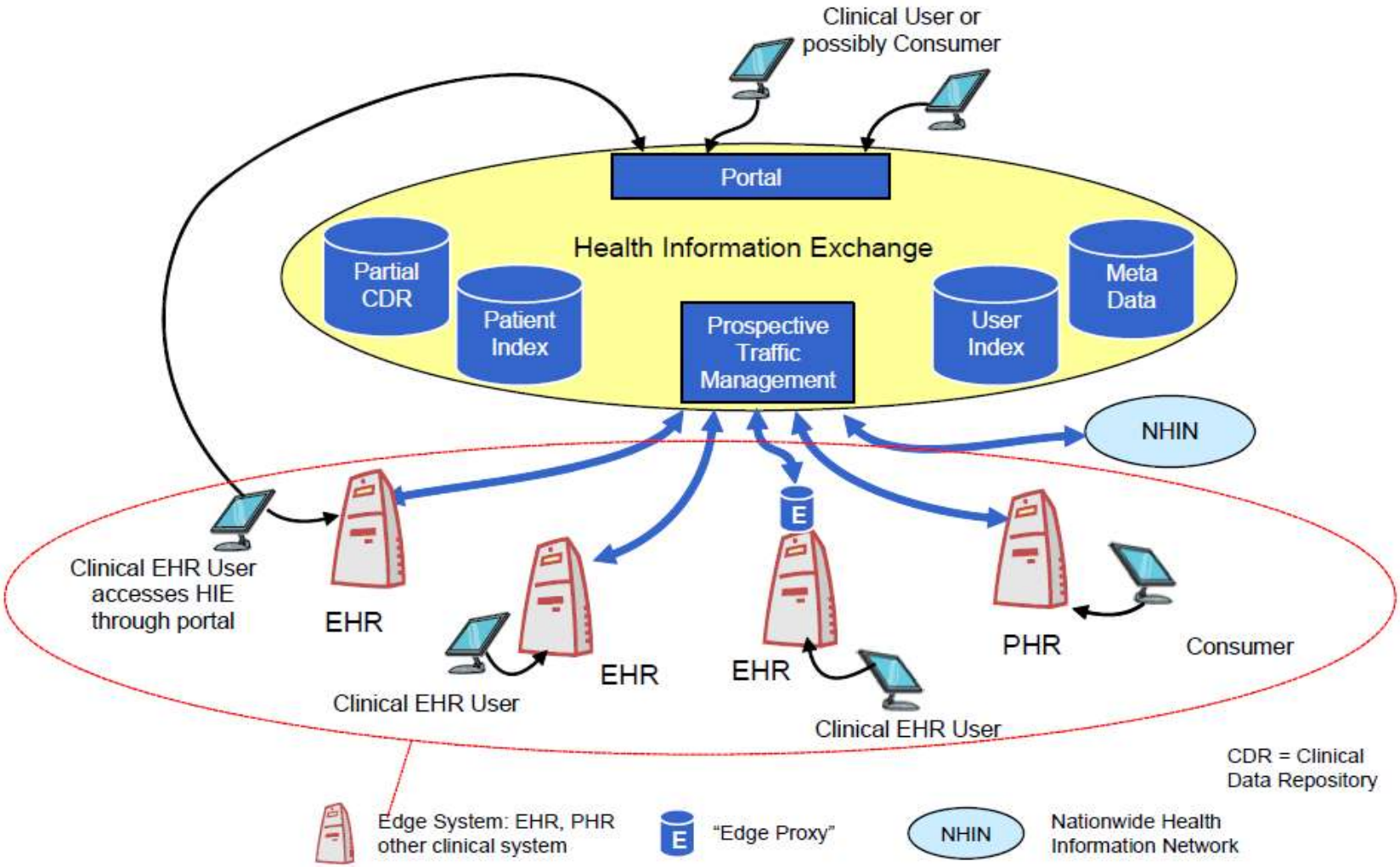
ARRA definition of meaningful use will stimulate HIE growth

Electronic Health Records

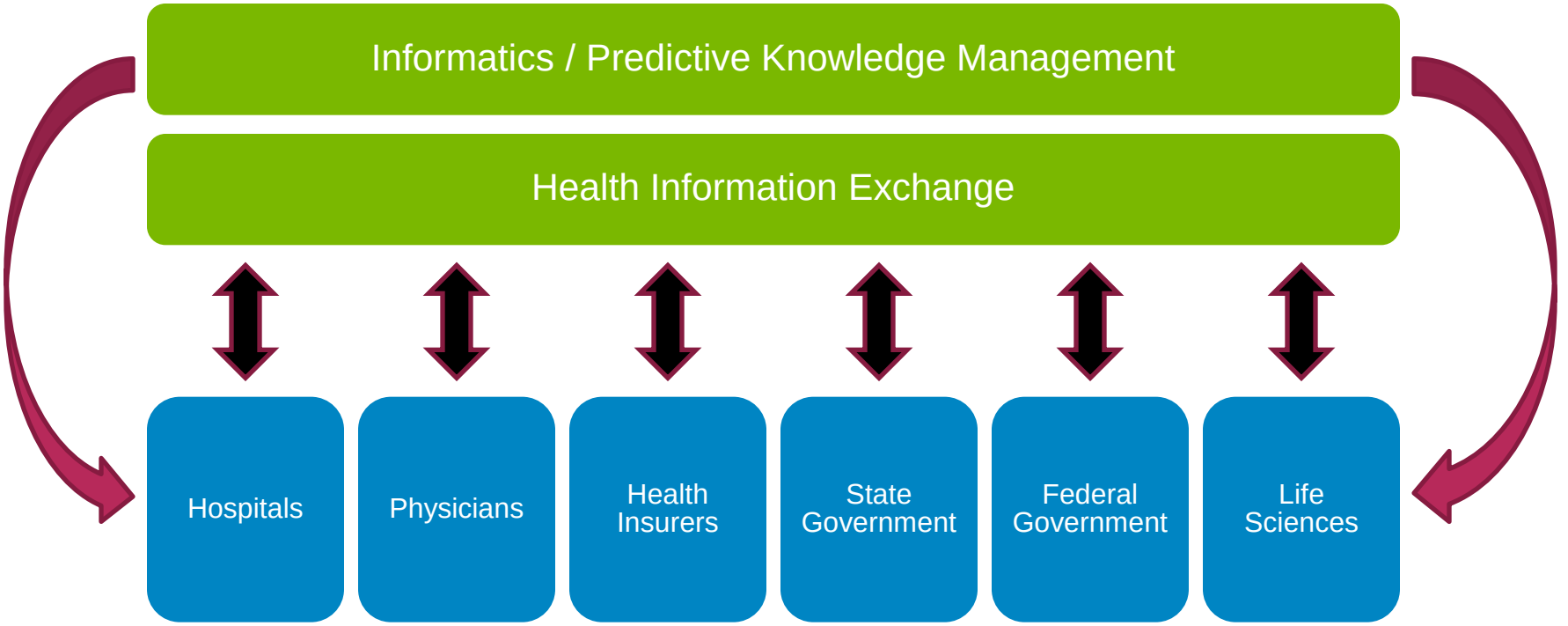
Certified EHR technology is connected in a manner that provides for electronic exchange of health information to improve quality of healthcare



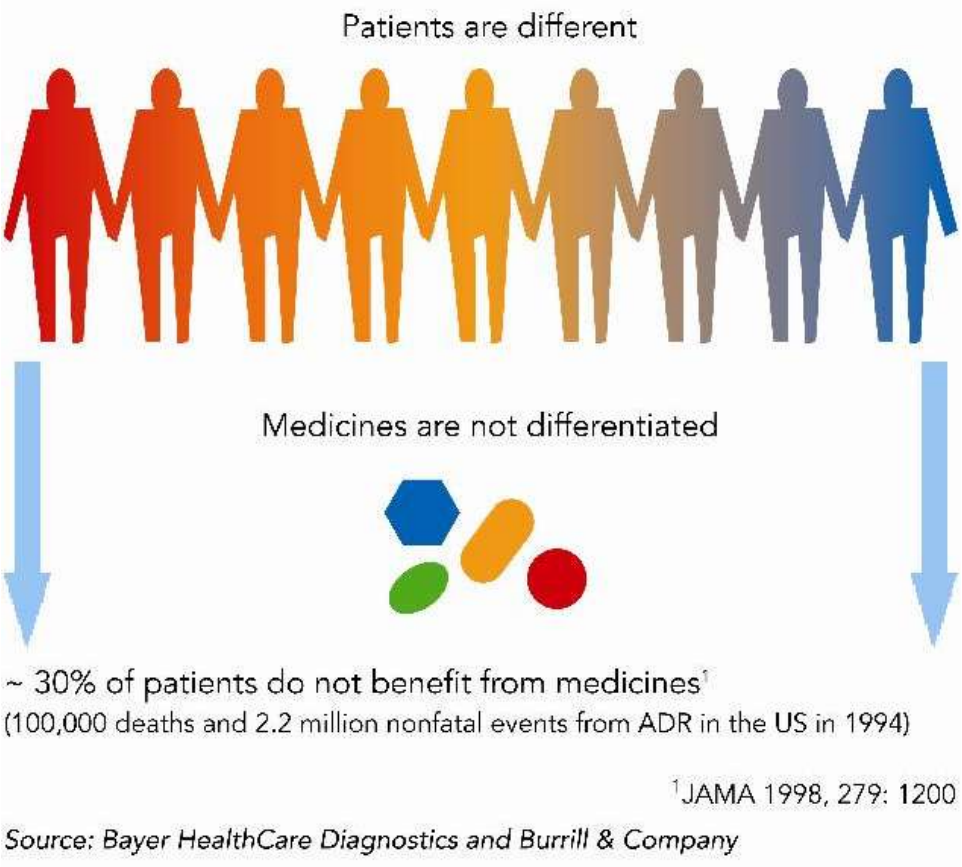
The Connectivity: Interoperability Exchanges



el l er vi ces eal t hcar e: expansi on oppor t uni t i es



Today's medicine challenge: One size doesn't fit all



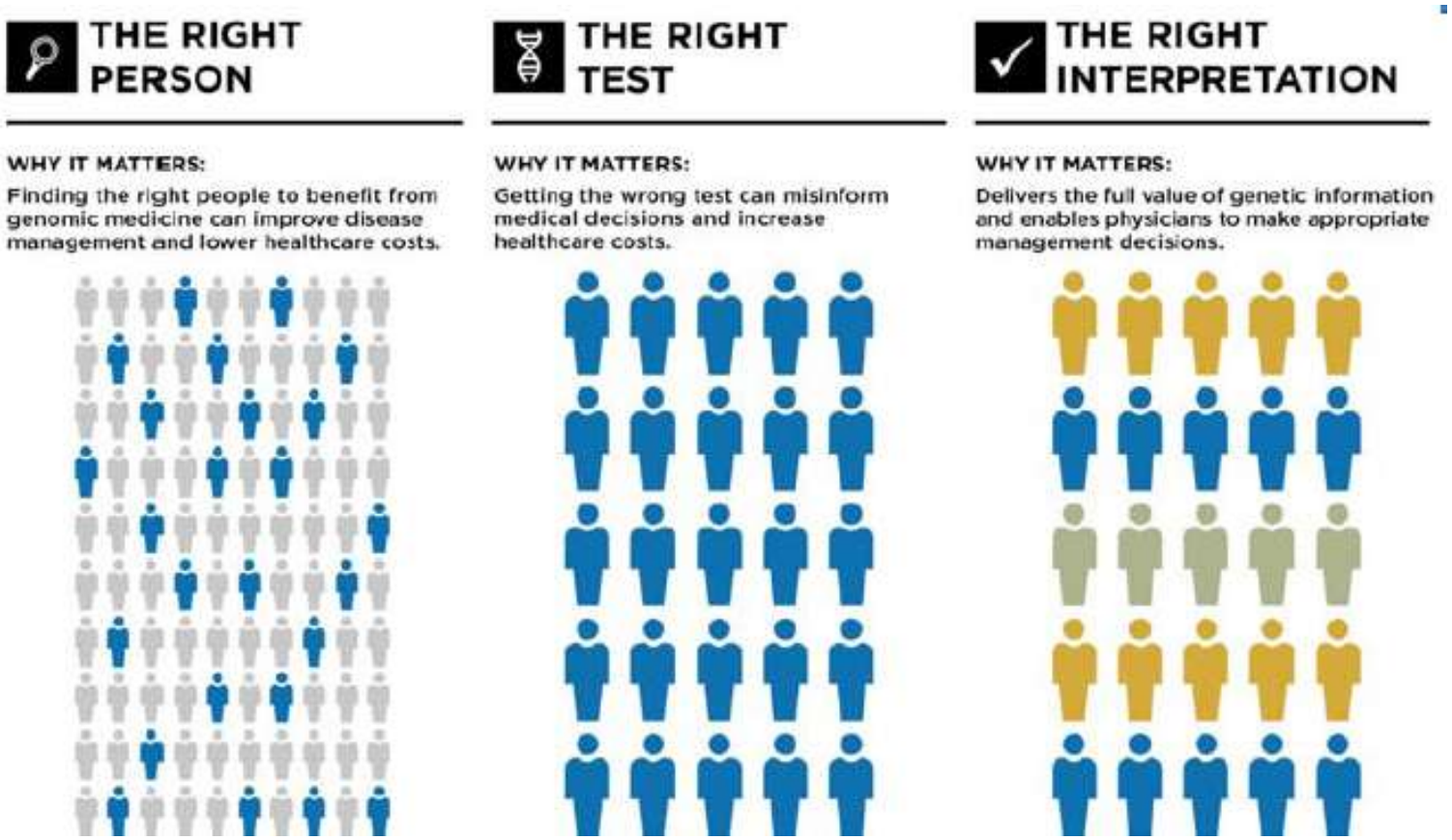
~ 30% of patients do not benefit from medicines[1]
(100,000 deaths and 2.2 million nonfatal events from ADR in the US in 1994)

[1]JAMA 1998, 279: 1200

Source: Bayer HealthCare Diagnostics and Burrill & Company

Information Makes Healthcare Personal… Again

Personalized Medicine – The current paradigm



(Source – DNA Direct)

The Genome: What it Takes and What it Costs?

Today: 1 Tb - 30 Minutes
Human Genome = $20k

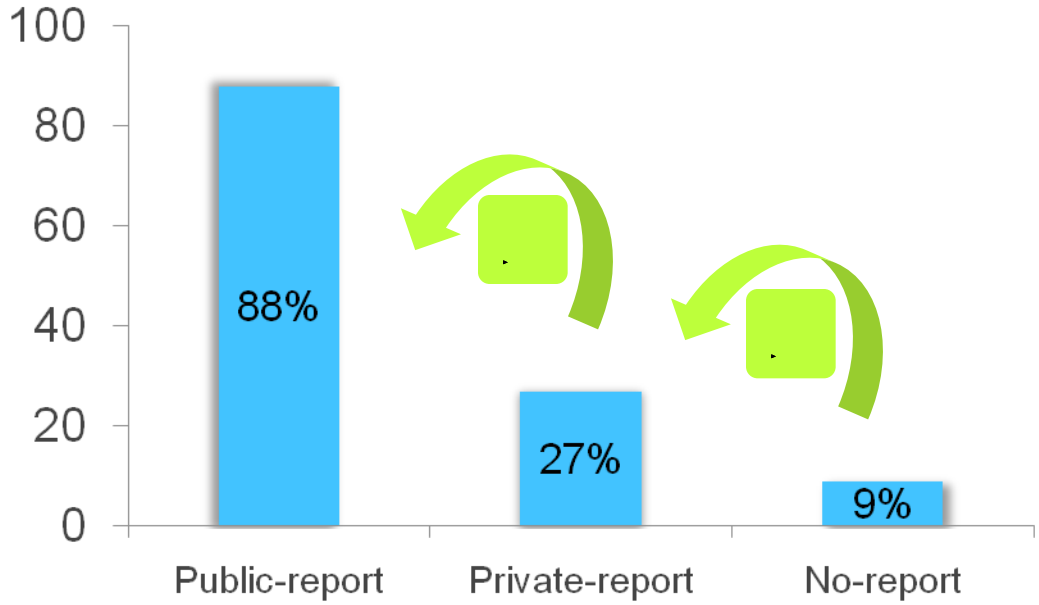
2012: 10 Tb - 30 Minutes
Human Genome = $1k

illumina

Transparency

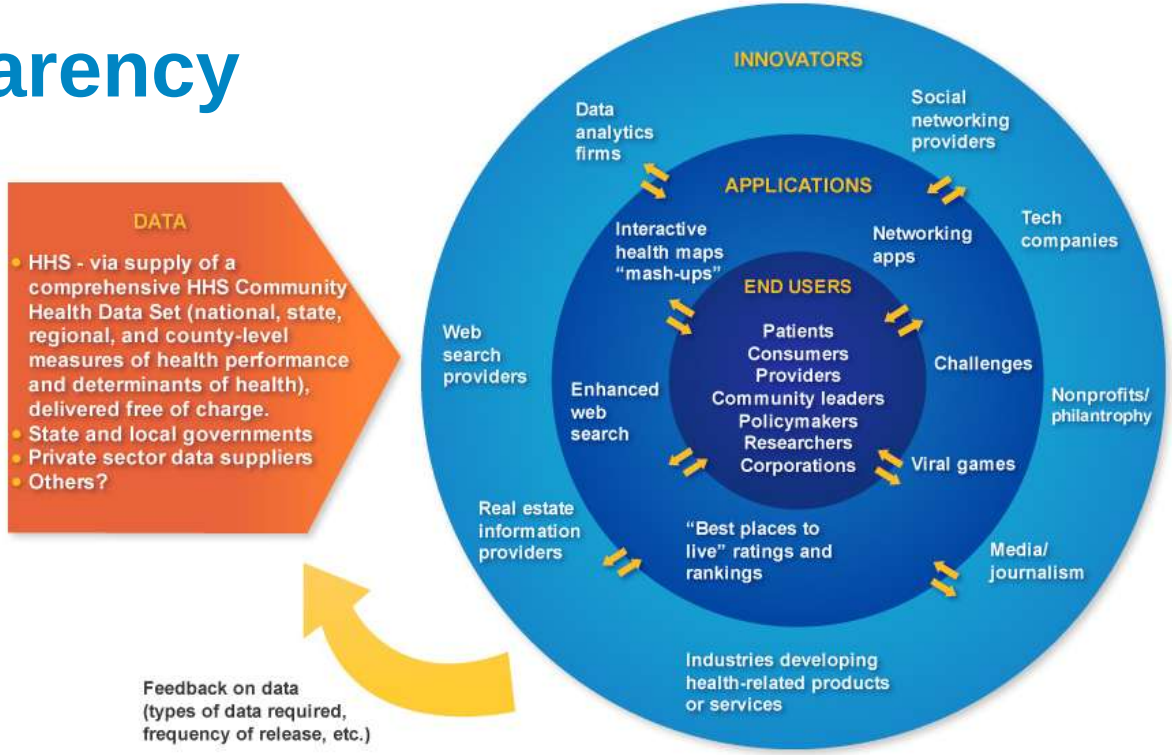
ubl i c di scl osure l eads t o per f or nance i npr ovenent

er cent age of hospi t al s wi t h qual i t y i npr ovenent act i vi t i es i n reduci ng henor r hage f ol l owi ng poor r esul t s i n . per f or nance



Reference: *Hibbard et al. Health Affairs 2003:22(4):84*

Transparency



- ommunity ealth ata nitiative – une ,
  - ublic-rivate roject = educate citizens on healthcare performance in their community + opening up the medical system
  - rovide data online
    - nitially edicare data on disease, quality, cost and utilization
  - imilar to the approach which compiles climate statistics
  - nd, it's just the beginning…

Dell Services in Personalized Medicine

- anages the system in hospitals that provide oncology services

- perates the at ational ommunity ancer ent er rogram sites t. osephs and scension ealth

So, What Does It All Mean?

- he onnecti vi t y
- he . enome
- he . et wor k
- nd, r anspar ency

= he ransformation…

Thank You

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